

RELATED APPLICATION INFORMATION

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This application is a continuation of U.S. Patent Application Serial No. 09/448,105, filed November 23, 1999, which is a divisional of U.S. Patent Application Serial No. 09/132,536 filed 11 August 1998, issued as U.S. Patent No. 6,040,498, which claims the benefit of U.S. Provisional Application No. 60/055,474 filed 12 August 1997, the disclosures of which are incorporated by reference herein in their entireties.

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In the Claims.

Please amend the claims as follows:

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38. (Amended) A stably transformed duckweed plant comprising a heterologous nucleic acid of interest incorporated in its genome.
 - 2
40. (Amended) The stably transformed duckweed plant according to Claim 38, wherein said duckweed plant comprises fewer than 5 copies of said heterologous nucleic acid of interest.
 - 3
41. (Amended) The stably transformed duckweed plant according to Claim 38, wherein said duckweed plant is selected from the group consisting of the genus *Spirodela*, genus *Wolffia*, genus *Wolffiella*, and genus *Lemna*.
 - 4
42. (Amended) The stably transformed duckweed plant according to Claim 38, wherein said duckweed plant is selected from the genus *Lemna*.
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43. (Amended) The stably transformed duckweed plant according to Claim 38, wherein said duckweed plant is selected from the group

consisting of a species of *Lemna minor*, a species of *Lemna miniscula*, and a species of *Lemna gibba*.

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44. (Amended) The stably transformed duckweed plant according to Claim ¹38, wherein said nucleic acid comprises at least one expression cassette comprising a gene which confers resistance to a selection agent.

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45. (Amended) The stably transformed duckweed plant according to Claim ⁶44, wherein said gene which confers resistance to a selection agent is selected from the group consisting of *neo*, *bar*, *pat*, *ALS*, *HPH*, *HYG*, *EPSP* and *Hml*.

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46. (Amended) The stably transformed duckweed plant according to Claim ¹38, wherein said nucleic acid comprises two genes of interest.

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47. (Amended) The stably transformed duckweed plant according to Claim ¹38, wherein said nucleic acid encodes a protein or peptide selected from the group consisting of insulin, growth hormone, α -interferon, β -glucocerebrosidase, retinoblastoma protein, p53 protein, angiostatin, leptin, and serum albumin.

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48. (Amended) The stably transformed duckweed plant according to Claim ¹38, wherein said nucleic acid encodes at least one protein or peptide subunit of a multimeric protein selected from the group consisting of hemoglobin, collagen, P450 oxidase, and a monoclonal antibody.

Please add the following new claims:

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64. The stably transformed duckweed plant according to Claim ¹38, wherein said nucleic acid encodes a secreted protein or peptide.

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62.

The stably transformed duckweed plant according to Claim ~~48~~⁵, wherein said duckweed plant is from a species of *Lemna minor*.

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63.

A stably transformed duckweed plant tissue comprising a heterologous nucleic acid of interest incorporated in its genome.

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64.

The stably transformed duckweed plant tissue according to Claim ~~63~~⁴³, wherein said plant tissue is meristematic tissue.

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65.

The stably transformed duckweed plant tissue according to Claim ~~63~~⁴³, wherein said plant tissue is frond tissue.

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66.

The stably transformed duckweed plant tissue according to Claim ~~63~~⁴³, wherein said plant tissue is callus tissue.

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67.

The stably transformed duckweed plant tissue according to Claim ~~66~~⁴⁶, wherein said plant tissue is Type I callus tissue.

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A duckweed tissue culture comprising the stably transformed duckweed plant tissue of Claim ~~63~~⁴³.

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A stably transformed duckweed cell comprising a heterologous nucleic acid of interest incorporated in its genome.

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A stably transformed duckweed plant comprising a chimeric nucleic acid of interest incorporated in its genome, wherein said chimeric nucleic acid comprises a coding sequence operably linked to a transcription initiation region that is heterologous to said coding sequence.

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FOOTNOTES 45272660

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The stably transformed duckweed plant according to Claim ⁵¹77, wherein said gene which confers resistance to a selection agent is selected from the group consisting of *neo*, *bar*, *pat*, *ALS*, *HPH*, *HYG*, *EPSP* and *Hml*.

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The stably transformed duckweed plant according to Claim ⁵⁰78, wherein said chimeric nucleic acid comprises two genes of interest.

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The stably transformed duckweed plant according to Claim ⁵⁰79, wherein said chimeric nucleic acid encodes a protein or peptide selected from the group consisting of insulin, growth hormone, α -interferon, β -glucocerebrosidase, retinoblastoma protein, p53 protein, angiostatin, leptin, and serum albumin.

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The stably transformed duckweed plant according to Claim ⁵⁰80, wherein said chimeric nucleic acid encodes at least one protein or peptide subunit of a multimeric protein selected from the group consisting of hemoglobin, collagen, P450 oxidase, and a monoclonal antibody.

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The stably transformed duckweed plant according to Claim ⁵⁰81, wherein said chimeric nucleic acid encodes a secreted protein or peptide.

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The stably transformed duckweed plant according to Claim ⁵⁴82, wherein said duckweed plant is from a species of *Lemna minor*.

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A stably transformed duckweed plant tissue comprising a chimeric nucleic acid of interest incorporated in its genome, wherein said chimeric nucleic acid comprises a coding sequence operably linked to a transcription initiation region that is heterologous to said coding sequence.

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Amend

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The stably transformed duckweed plant tissue according to Claim ⁵⁴~~84~~, wherein said plant tissue is meristematic tissue.

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The stably transformed duckweed plant tissue according to Claim ⁵⁴~~84~~, wherein said plant tissue is frond tissue.

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The stably transformed duckweed plant tissue according to Claim ⁵⁴~~84~~, wherein said plant tissue is callus tissue.

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88.

The stably transformed duckweed plant tissue according to Claim ⁶⁷~~87~~, wherein said plant tissue is Type I callus tissue.

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89.

A duckweed tissue culture comprising the stably transformed duckweed plant tissue of Claim ⁵⁴~~84~~.

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A stably transformed duckweed cell comprising a chimeric nucleic acid of interest incorporated in its genome, wherein said chimeric nucleic acid comprises a coding sequence operably linked to a transcription initiation region that is heterologous to said coding sequence.